

UArctic Thematic Network on Arctic Telecommunications and Networking

Member info

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Jaap van de Beek is chaired professor of Signal Processing with Luleå University of Technology, Sweden, and a Fellow of the IEEE. Prior to returning to academia in 2013, he spent over two decades in industry, in telecommunications research labs with Telia Research, Nokia Networks, and for more than twelve years with Huawei Technologies.

In different roles he has been involved in three generations of mobile cellular communications systems. He developed base station receiver algorithms for GSM evolution systems. He was among those pioneering OFDM as an access scheme for cellular radio in a standard proposal for the third generation systems in 1997, and during 2004-2009 he has been contributing to the preparation and specification of 3GPP's fourth generation LTE standard, for which he holds a number of essential patents.

More recently, he has been developing methods that efficiently reduce spectral interference of radio transmitters in 5G systems and beyond, work for which he received the IEEE Communications Society Heinrich Hertz award.

Since 2012, Prof. van de Beek engages in improving Internet access, wireless network connectivity and cellular radio coverage in rural and remote regions.